



HONOLULU RAIL TRANSIT  
**SYMPOSIUM 2009**

## Project Overview

June 23, 2009

# HONOLULU RAIL TRANSIT



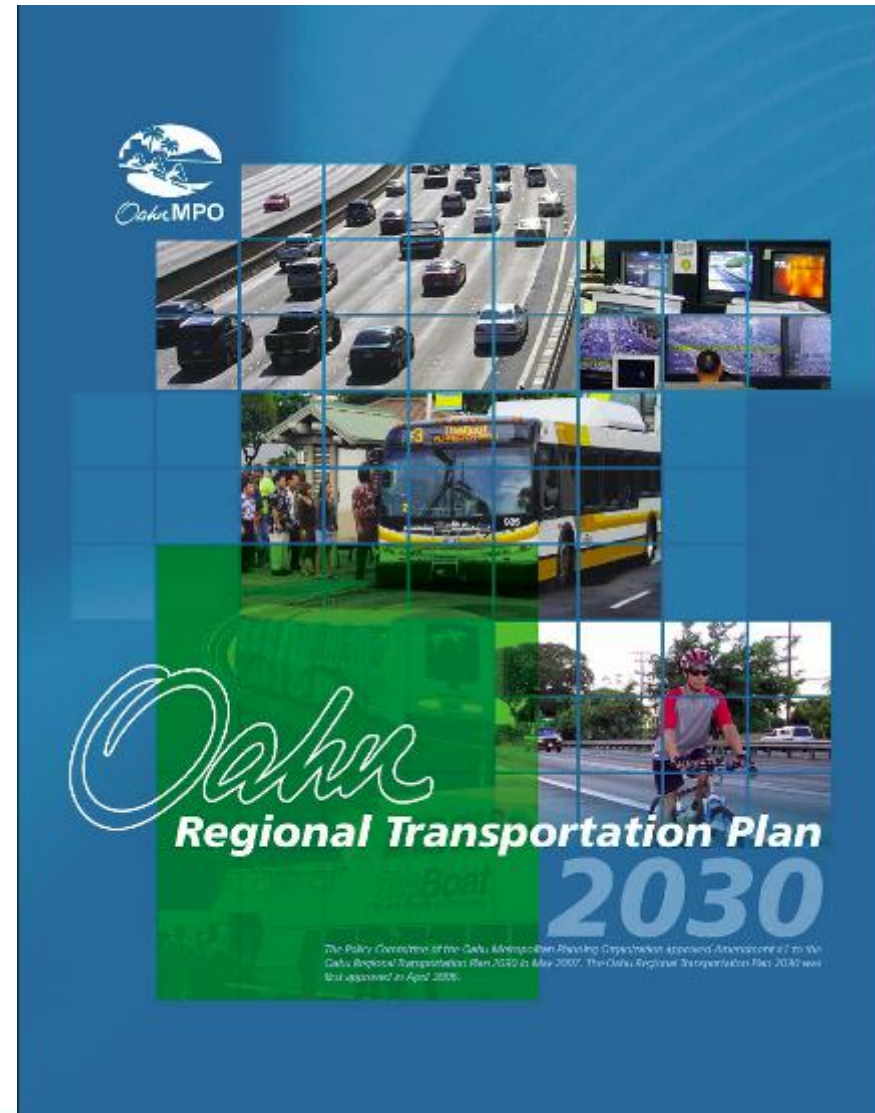
# Planning for the Future

## O'ahu in 2030

- 200,000 more residents than in 2005  
(22% more people)
- 100,000 more jobs than in 2005  
(21% more jobs)
- 750,000 more daily trips than in 2005  
(27% more trips)

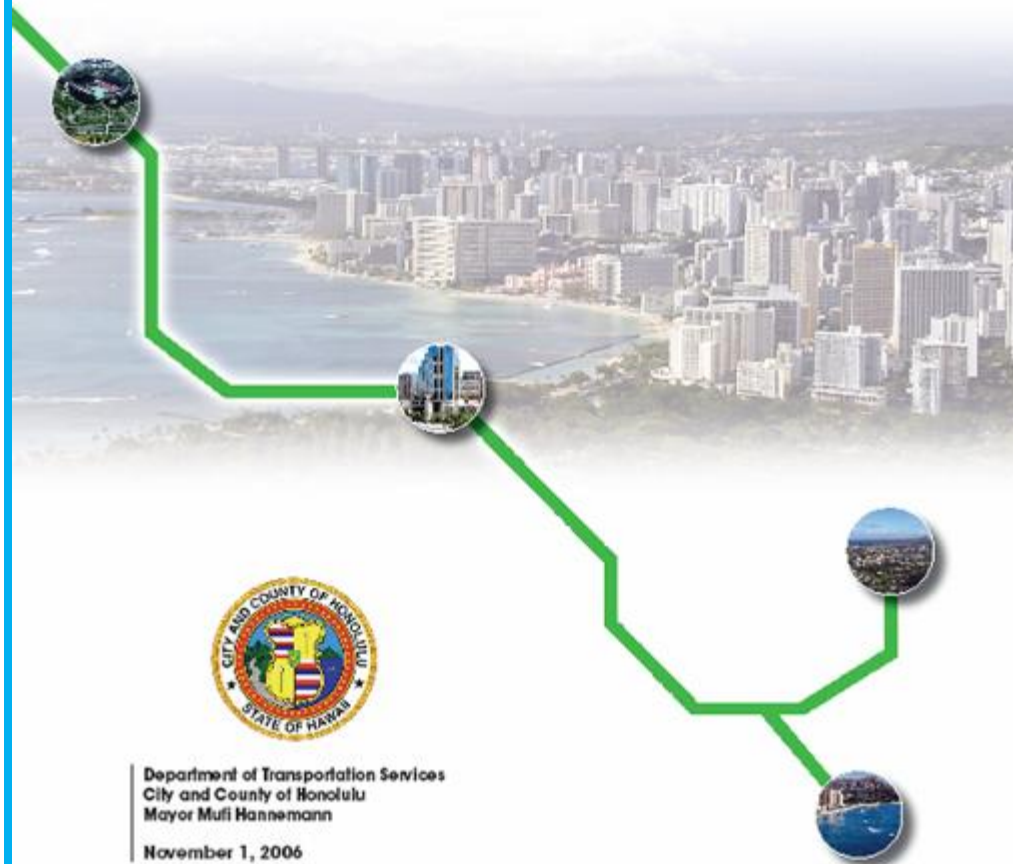
# Multi-Modal Options to Improve Mobility

- Highway Capacity Expansion
- Traffic Engineering Improvements
- Pedestrian and Bicycle Projects
- Expansion of TheBus
- Fixed Guideway Project





# Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Report



# Four Alternatives

- **No Build**
  - No Major Transit Improvements
- **Transportation System Management**
  - Expanded Bus Service
- **Managed Lane**
  - Buses on Managed Lanes
- **Fixed Guideway**
  - Alignment Options
    - Various Routes
    - Elevated, at-grade, underground

# City Council Selection

## December 22, 2006

- By a vote of 7 to 2 the City Council selected Fixed Guideway in an exclusive right-of-way

COUNCIL	12/22/06	CR-508 ADOPTED. BILL 79, CD2, FURTHER AMENDED ON THE COUNCIL FLOOR TO CD2, FD1, HOWEVER, BILL 79, CD2, FD1, FURTHER AMENDED TO BILL 79, CD2, FD2 (FINAL #2), AND SUBSEQUENTLY PASSED THIRD READING, AS AMENDED (BILL 79, CD2, FD2 (FINAL #2))  (NOTE: <u>BILL 79 (2006), PROPOSED CD2, FD1 (NORTH-SOUTH BRANCH, NON-LPA COMMITMENT)</u> WAS ALSO CONSIDERED AND SUBSEQUENTLY WITHDRAWN)					
	APO Y	CACHOLA Y	DELA CRUZ Y	DJOU N	GARCIA Y		
	KOBAYASHI Y	MARSHALL N	OKINO Y	TAM Y			

# Decisions Made

- **Choice of Mode**
  - Fixed Guideway in Exclusive Right-of-Way
- **Choice of Alignment**
  - Initially – East Kapolei to Ala Moana Center
  - Ultimately – Kapolei to UH Mānoa and Waikīkī
- **Choice of Vehicle Technology**
  - Steel Wheel on Steel Rail – “Light Metro”



# Why Not Surface Light Rail?

- Slower operating speed – less than 20 mph vs. 30+ mph for elevated
- 36% higher O&M cost per passenger mile
- Reduces highway capacity
- More localized traffic congestion
- More property acquisitions and relocations
- Greater impacts to cultural/archeological resources

# Elevated Guideway Simulation



Kamehameha Highway near Acacia Street, looking 'ewa

# Elevated Guideway Simulation



**Kamehameha Highway at Kaonohi Street, looking makai**



# What could it look like?



# What could it look like?





# Travel Times from Kapolei

Destination	Travel Time
Pearl Highlands	14 minutes
Airport	26 minutes
Kalihi	32 minutes
Downtown	38 minutes
Ala Moana Center	42 minutes

# How much will it cost to build?

	Millions of 2008 Dollars
Estimated Construction Cost	2,100
Design / Construction Contingency	555
<b>Construction Subtotal</b>	<b>2,655</b>
Right-of-Way	150
Vehicles	295
Professional Services	795
Project Reserve	230
<b>Capital Cost</b>	<b>4,125</b>
Finance Charges	380
<b>TOTAL COST</b>	<b>4,500</b>

# Sources and Uses of Funds

	Millions of Inflated \$
GET Surcharge Revenues	4,050
FTA New Starts Funds	1,385
<b>TOTAL REVENUE</b>	<b>5,435</b>
Capital Cost	4,930
Finance Charges	505
<b>TOTAL COST</b>	<b>5,435</b>

# Operating & Maintenance Cost

- Rail operating & maintenance cost, after fares, will be about 2-3% of the City's annual operating budget, an amount that can be accommodated without an increase in taxes
- **A bus + rail system costs less to run than carrying the same number of people on a bus-only system**

# Projected Economic Benefits

- Will create about 10,000 jobs a year in  
Construction,  
support  
services,  
retail, and  
other  
industries





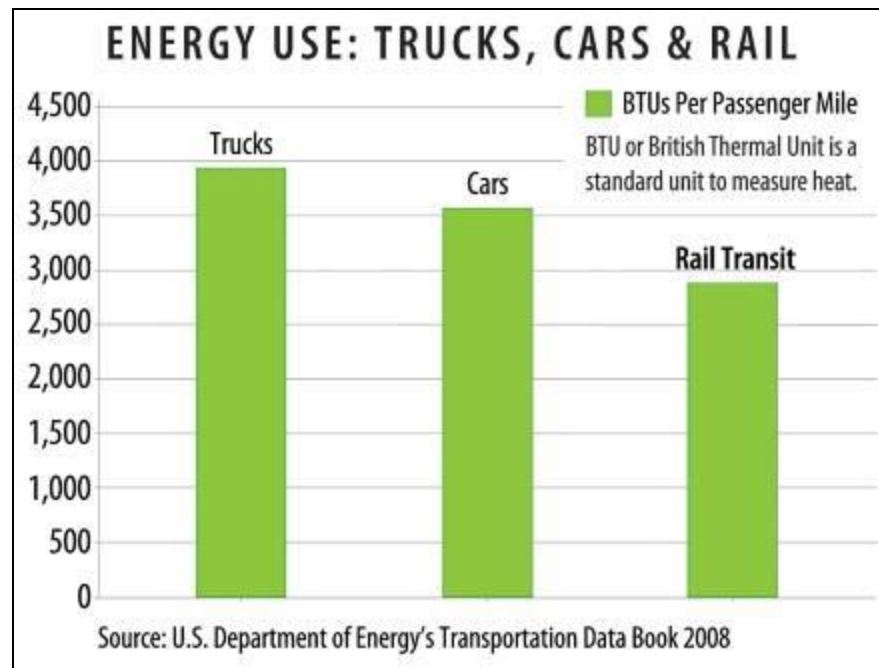
# Traffic Benefits

- Rail will reduce future traffic delay by over 20%
- Rail will remove more than 30,000 cars from our roads each day
- One 300-passenger train can take 200 vehicles off our roads



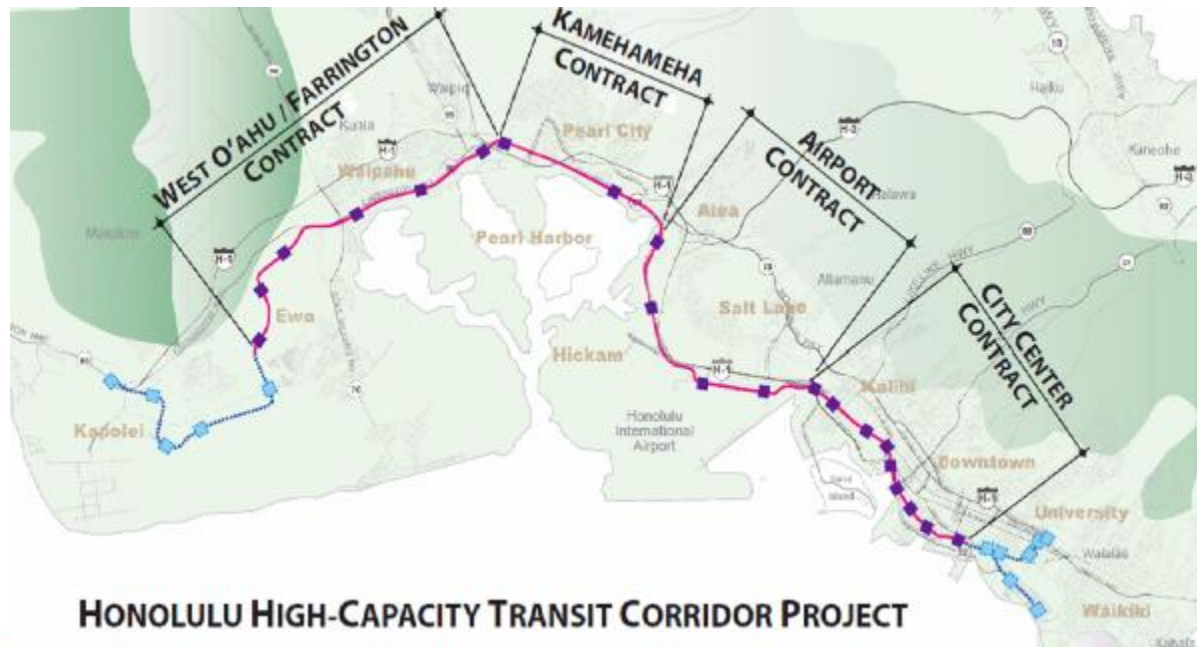
# Environmental Benefits

- Electrically powered trains use less energy per passenger mile than cars



# Moving Forward

- **Late Summer 2009:** Release of Final EIS
- **Fall 2009:** FTA issues Record of Decision
- **Fall 2009:** Award design/build contract for first phase



HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

# What's Next...

- **Spring 2011:** Full funding grant agreement with the federal government
- **Late 2012:** Initial service in Waipahu
- **Late 2018:** Start full service between East Kapolei and Ala Moana